

ANNUAL REPORT FOR 2004



Hatteras Island Breach Site Dare County



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SUMMARY

The following report summarizes the monitoring activities that have occurred in the Year 2004 at the Hatteras Island Breach Site. The site is located in Dare County, North Carolina. The site was constructed in the Spring 2004 by the North Carolina Department of Transportation (NCDOT) to provide beach nourishment for the roadway repairs along NC 12. This report provides the monitoring results for the first documented year of monitoring (Year 2004). According to the North Carolina Division of Coastal Management Permit #139-03, the Hatteras Island Breach Site will be monitored for one year or until success criteria are met.

No hydrologic monitoring is required for this project; however, vegetation monitoring is required for one year. For 2004, the vegetation monitoring revealed a frequency of target species at 93.3% and the vegetative coverage scale value at 2.70. The vegetation data for 2004 met the 70% required frequency of target species and is on track to meet the scale value of 5 for the vegetative coverage. Based on the monitoring results from the 2004-growing season, NCDOT recommends discontinuing monitoring of the site.

1.0 INTRODUCTION: HATTERAS ISLAND BREACH SITE

1.1 Project Description

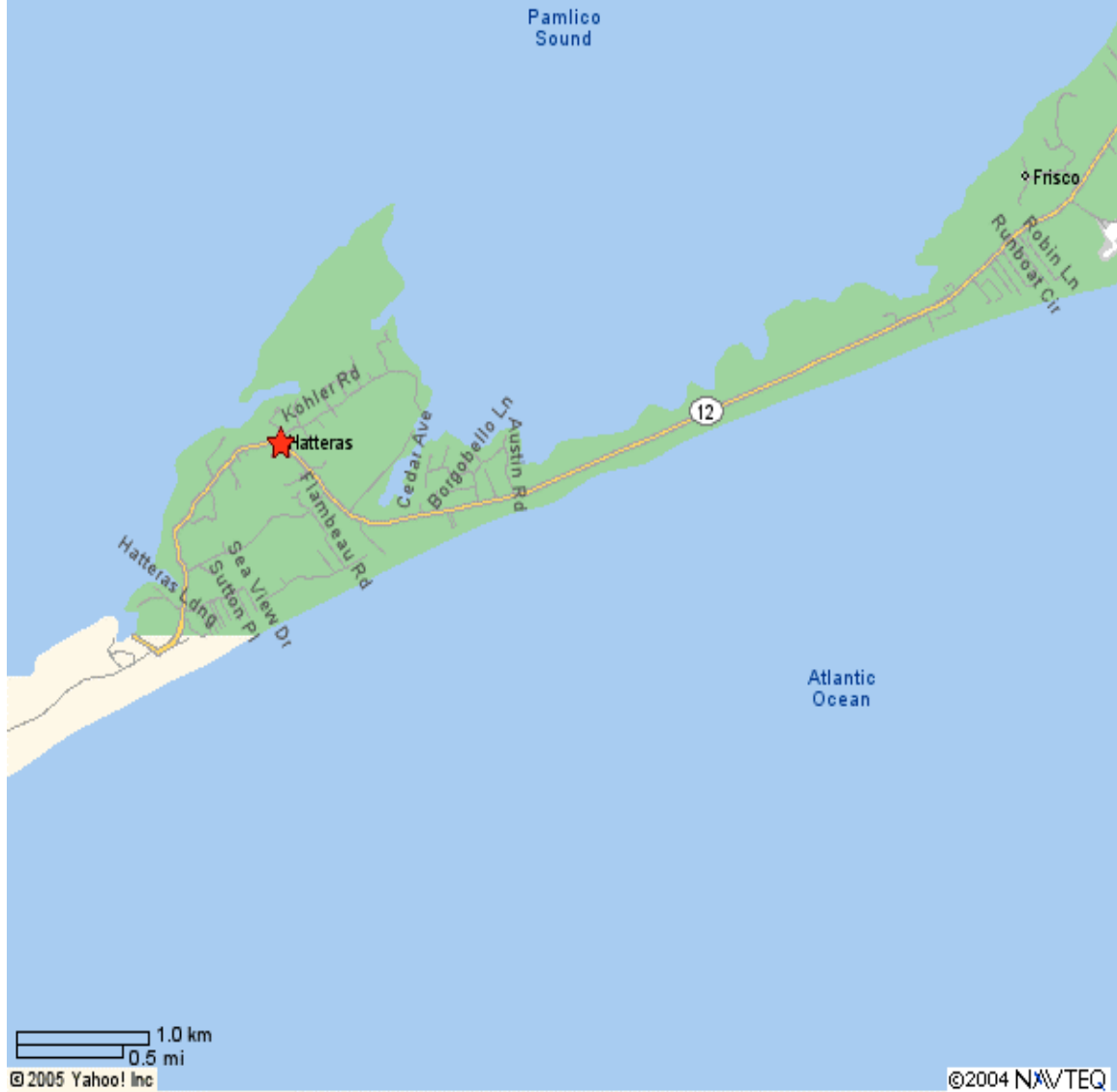
The Hatteras Island Breach Site is located Dare County adjacent to NC 12 north of Hatteras (Figure 1). The site was completed to provide beach nourishment for the roadway repairs along NC 12.

1.2 Purpose

The purpose of this report is to detail the vegetation monitoring in 2004 at the Hatteras Island Breach Site. No hydrologic monitoring is required for this particular site.

1.3 Project History

April 2004	Site Planted
September 2004	Vegetation Monitoring (1 yr.)



2.0 VEGETATION: HATTERAS ISLAND BREACH SITE (YEAR 1 MONITORING)

2.1 Success Criteria

The vegetative marsh success of the wetland site will be determined in accordance with NMFS Guidelines. Monitoring plots found to be located within the open water channel will not be evaluated, and will not count toward the final count of plots. The vegetation component of the wetland site will be deemed successful if the following criteria are met:

1. At year five, the average of all plots should have a scale value of 5 (75% vegetative cover) consisting of wetland herbaceous species, not including any invasive species.
2. A minimum of 70% of the plots shall contain the target (planted) species.

2.2 Description of Species

The following species was planted in the Beach Restoration Area:

Spartina patens, Salt Meadow Hay

2.3 Results of Vegetation Monitoring

Plot #	Scale Factor	<i>Spartina patens</i>	Frequency	Comments
1	2.0	✓	✓	
2	4.0	✓	✓	
3	0.0			Bare Ground
4	2.0	✓	✓	
5	2.0	✓	✓	
6	2.0	✓	✓	
7	2.0	✓	✓	
8	2.0	✓	✓	
9	3.0	✓	✓	
10	5.0	✓	✓	
11	5.0	✓	✓	
12	1.0	✓	✓	
13	2.0	✓	✓	
14	4.0	✓	✓	
15	5.0	✓	✓	
Frequency (Percentage of Plots with Desired Species)			93.3%	
Sum Scale Value			41.0	
Total Number of Plots			15	
Vegetative Cover (Scale Value)			2.7	

Site Notes: Other species noted: None

2.4 Conclusions

The scale value and frequency are on track for year 1.

NCDOT proposes to discontinue the vegetation monitoring at the Hatteras Island Breach Site.

APPENDIX A

SITE PHOTOS/PHOTO AND VEGETATION PLOT LOCATIONS

Hatteras Island Breach



Photo 1



Photo 2



Photo 3



Photo 4

Hatteras Island - Breach Site

